



News release from Vestas Wind Systems A/S and Windlab Limited

19 October 2017

Windlab and Vestas partner on the world's first utility-scale hybrid integrating wind, solar and storage

A partnership between renewable energy industry leaders has announced the final details of a project that will help accelerate the transition to an energy mix led by renewable energy and aim to provide even more reliable and consistent renewable energy production adapted to energy demand and grid requirements.

Developed by Australia's international renewable energy company, Windlab, with support from Vestas, the global leader in sustainable energy solutions, the innovative 60.2 MW Kennedy Energy Park phase I is the world's first utility-scale, on-grid wind, solar and battery energy storage project. Designed to supply consistent and reliable renewable electricity that can help meet power demand in Australia, Kennedy Phase I can also shape a path forward for how Australia and other countries can integrate more renewable energy into their energy mix and address grid stability challenges that have been a traditional restraint to greater uptake of renewable energy.

The project is located in Flinders Shire in central north Queensland, Australia, which is blessed with world-class wind and solar resources. Kennedy Phase I will feature 43.2 MW of Vestas' V136-3.6 MW wind turbines, 15 MW of solar and 2 MW/4 MWh Li Ion battery storage, all managed by a Vestas customised control system that will operate the hybrid power plant.

In order to support further hybrid projects in Australia, Windlab, with Vestas, will share the knowledge and experience from building and operating Kennedy Phase I through the Australian Renewable Energy Agency.

"Kennedy Phase I is a first of its kind of project in Australia and it will lead the nation in the deployment of innovative, high reliability renewable energy capable of closely matching network power demand," Windlab CEO Roger Price said. *"We have a great working relationship with Vestas, whose products and service capabilities were instrumental in managing challenging grid connections and compliance, and develop a competitive cost of energy."*

Through the complimentary combination of wind and solar energy, Kennedy Phase I can deliver a more constant and demand-driven energy production and increased capacity factor. The Vestas control system will provide the capability for wind and solar to work together as an integrated power plant and comply with grid requirements.

"We are grateful for the opportunity to join Windlab on this project, which places Vestas at the forefront of sustainable energy solutions and is a testament to how we are providing solutions that make renewable energy more cost-competitive and grid compliant. With 35 years of experience in meeting complex grid requirements and developing advanced power plant controllers, Vestas has the foundation to also lead the way in hybrid solutions," said Johnny Thomsen, Senior Vice President, Product Management for Vestas.

"Hybrid solutions combining wind, solar and storage hold a huge potential for Australia. Kennedy Phase I has the potential to leverage Australia's abundant renewable energy resources and be a giant leap forward for the country in reaping those resources while ensuring a consistent and reliable electricity supply. Kennedy shows that Vestas, together with visionary partners like Windlab, can provide the solutions," said Clive Turton, President of Vestas Asia Pacific.



Vestas will also provide a 15-year Active Output Management 4000 (AOM 4000) service agreement, which includes a full-scope service package for the wind turbines as well as scheduled maintenance for the solar panels, battery storage and electrical systems.

A consortium between Vestas and Quanta Services will deliver the engineering, procurement and construction of the project, which is expected to be in operation by the end of 2018.

This project is planned to be the first phase of Windlab's larger 1,200 MW Kennedy Energy Park, which seeks to deliver significant benefits to north Queensland and Australia in reduced emissions and sustainable energy generation.

For more information, please contact:

Vestas

Anders Riis
External Communications
Tel: +45 4181 3922
Email: ANPRR@vestas.com

Windlab

Roger Price
Executive Chairman
Tel: +61 411 222 044
Email: Roger.price@windlab.com

About Windlab

Windlab Limited is a global renewable energy development company, established to commercialise world-leading atmospheric modelling and wind energy assessment technology, developed by Australia's premier scientific research institute, the CSIRO. Windlab owns and exclusively utilises this suite of industry best practice tools to identify and efficiently develop, finance, construct and operate high-quality wind farms around the world, with considerably greater certainty and substantially less risk. Windlab has a portfolio of development sites totalling 6,766 MW of potential capacity across North America, Australia, New Zealand and Southern Africa. Windlab played a foundation role in the creation of Australia's wind industry and is now leading the development of the industry in Southern Africa. Windlab has 1,033 MW of capacity across three continents, in projects either currently in operation or under construction.

About Vestas

Vestas is the energy industry's global partner on sustainable energy solutions. We design, manufacture, install, and service wind turbines across the globe, and with 85 GW of wind turbines in 75 countries, we have installed more wind power than anyone else. Through our industry-leading smart data capabilities and unparalleled more than 71 GW of wind turbines under service, we use data to interpret, forecast, and exploit wind resources and deliver best-in-class wind power solutions. Together with our customers, Vestas' more than 22,500 employees are bringing the world sustainable energy solutions to power a bright future.

For updated Vestas photographs and videos, please visit our media images page at: <https://www.vestas.com/en/media/images>. We invite you to learn more about Vestas by visiting our website at www.vestas.com and following us on our social media channels.